Bridging the understanding gap



PHONAK
life is on

Frequently Asked Questions…So Far

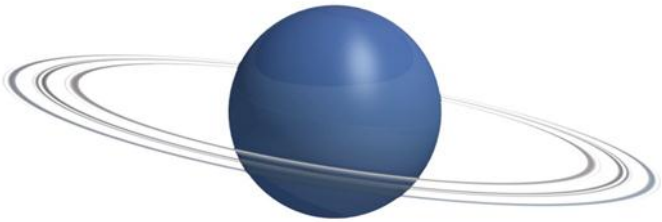
- Questions staring to emerge from the field
- Todays presentation shall focus on some of the most commonly asked questions to date
- Special thanks to Janace Daley for compiling the list



PHONAK
life is on

What is Roger?

- Roger is a digital wireless radio system allowing for long range, low delay, and full audio broadcast to miniature low power receivers.
- It operates in the 2.4GHz band, utilizing adaptive frequency hopping to avoid electromagnetic interference, and has an audio bandwidth around 7,300Hz.
- The frequency hopping occurs 800 times per second.
- It is adaptive…both the microphones and the receivers are constantly checking for and avoiding any potential interferences
- There are no channels to manage…It is like each and every Roger microphone has a unique address



PHONAK
life is on

How is Roger different from FM

- Dynamic FM uses a specific channel at 216 MHz. It stays on that channel at all times, even if there is another device on the same channel.
- Roger transmits on the ISM (Industry, Science, and Medical) band. This is centred at 2.4 GHz.
- However, unlike FM, frequency planning is not required with Roger because Roger does not use set frequencies but employs frequency hopping technology providing zero hassle, avoiding interference and providing a secure (tap proof) signal.



PHONAK
life is on

So, is Roger like Bluetooth?

- Not at all
- Bluetooth also uses a radio frequency in the 2.4GHz range to transmit information but only over short distances of generally 33 feet (10 meters) or less.
- Roger transmits information over longer distances 50 feet (15 meters) in doors and 130-170 feet (40-50 meters) outside.
- In addition, Bluetooth has significantly higher battery consumption due to the back and forth communication between the transmitter and the receiver. Power consumption is much lower, allowing it to run off a 1.4 V hearing aid battery.
- With Bluetooth the number of receivers is limited to usually 1 or 2 with a maximum limit of three receivers. With Roger the number of receivers is ***unlimited***.

roger ≠ 

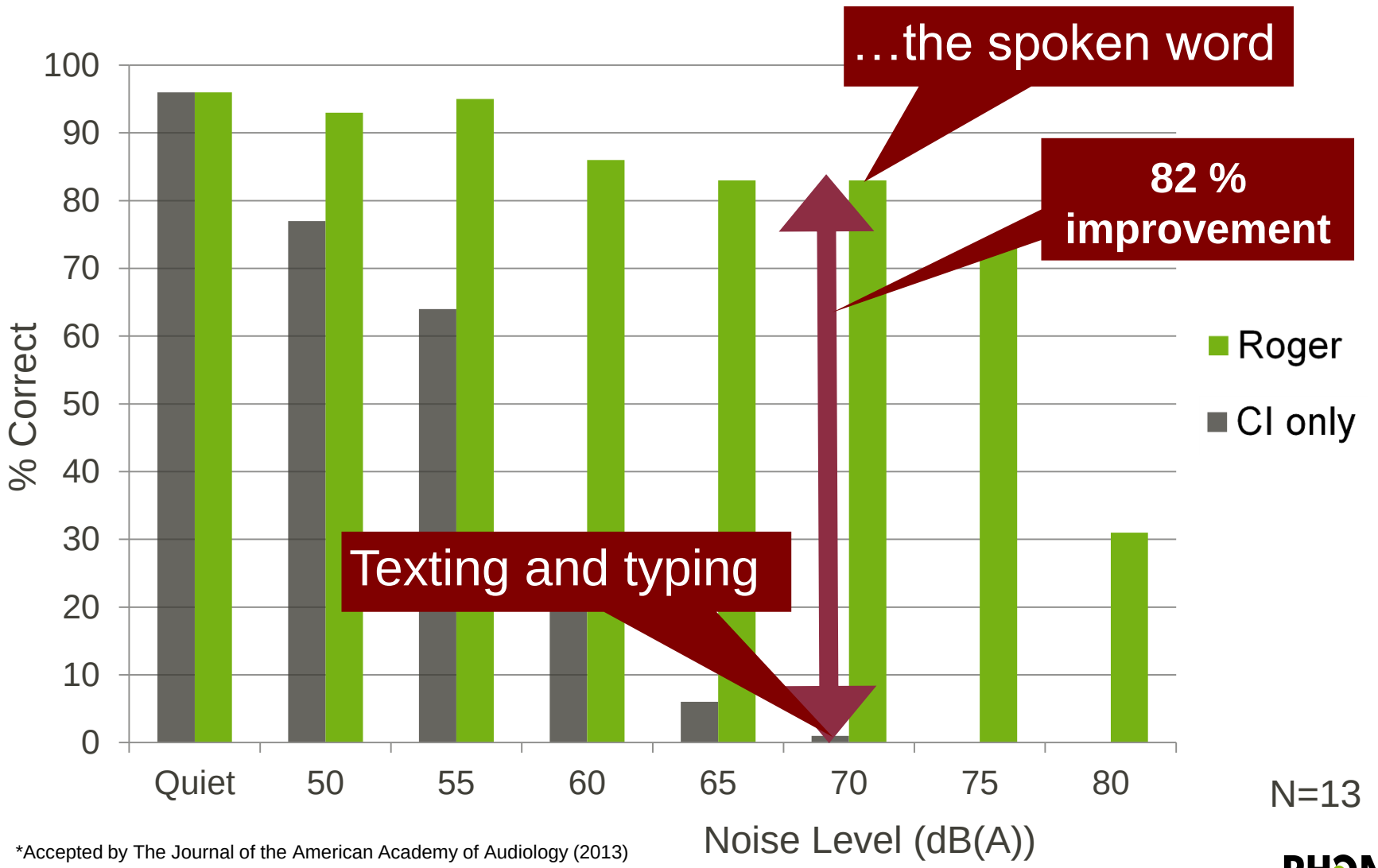
Is Roger better than FM? Why?

- Roger provides better performance in high noise situations than Dynamic FM due to advanced digital processing. It reduces that amount of noise picked up by both the transmitting microphone and by the hearing instrument microphone.
- This results is a much higher word understanding capability. See next slide for Dr. Linda Thibodeau's data
- It is interference free due to the unique frequency hopping technology. It is zero hassle since managing frequencies is unnecessary and it is simple to "connect".



PHONAK
life is on

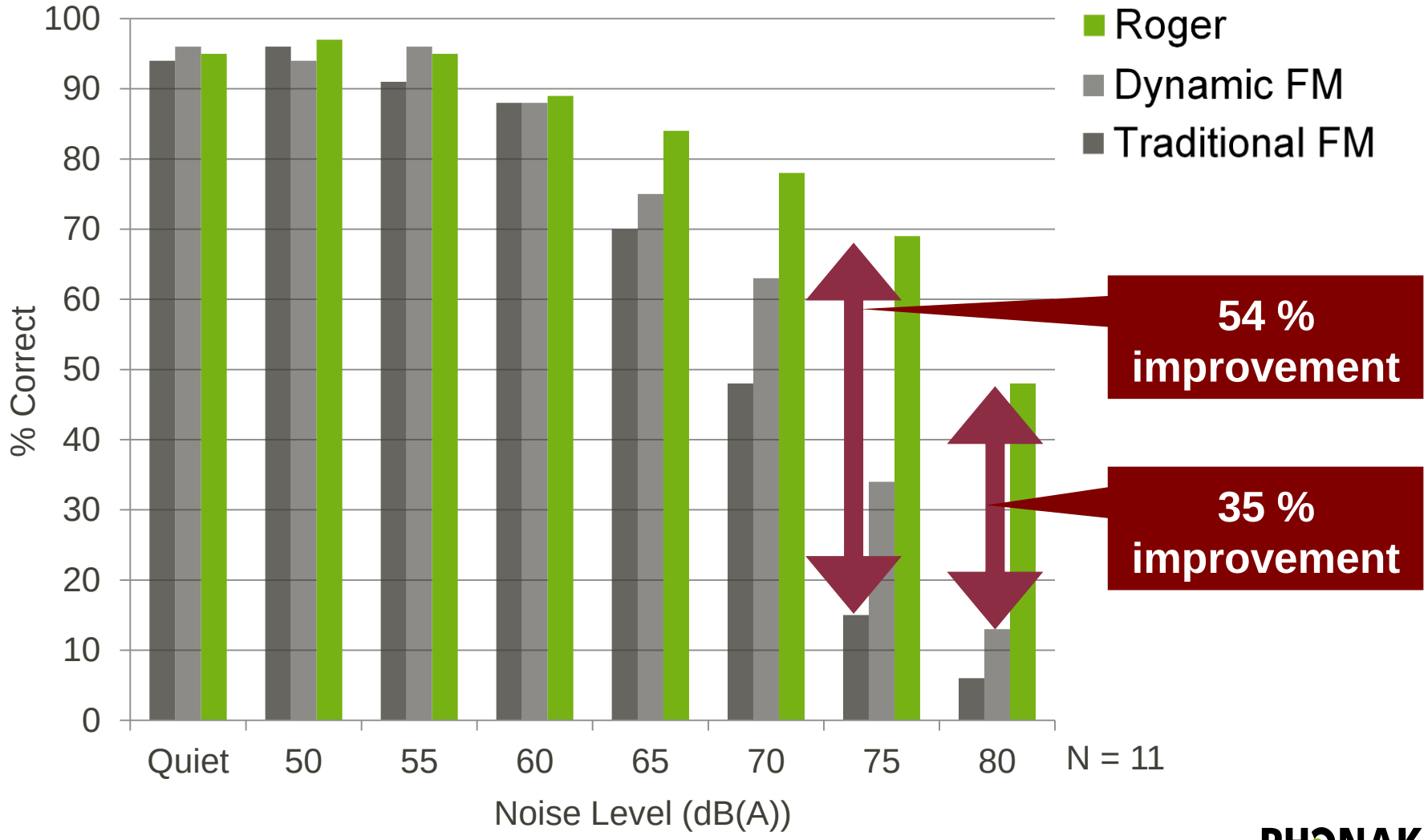
Speech understanding in various noise levels; AB Harmony



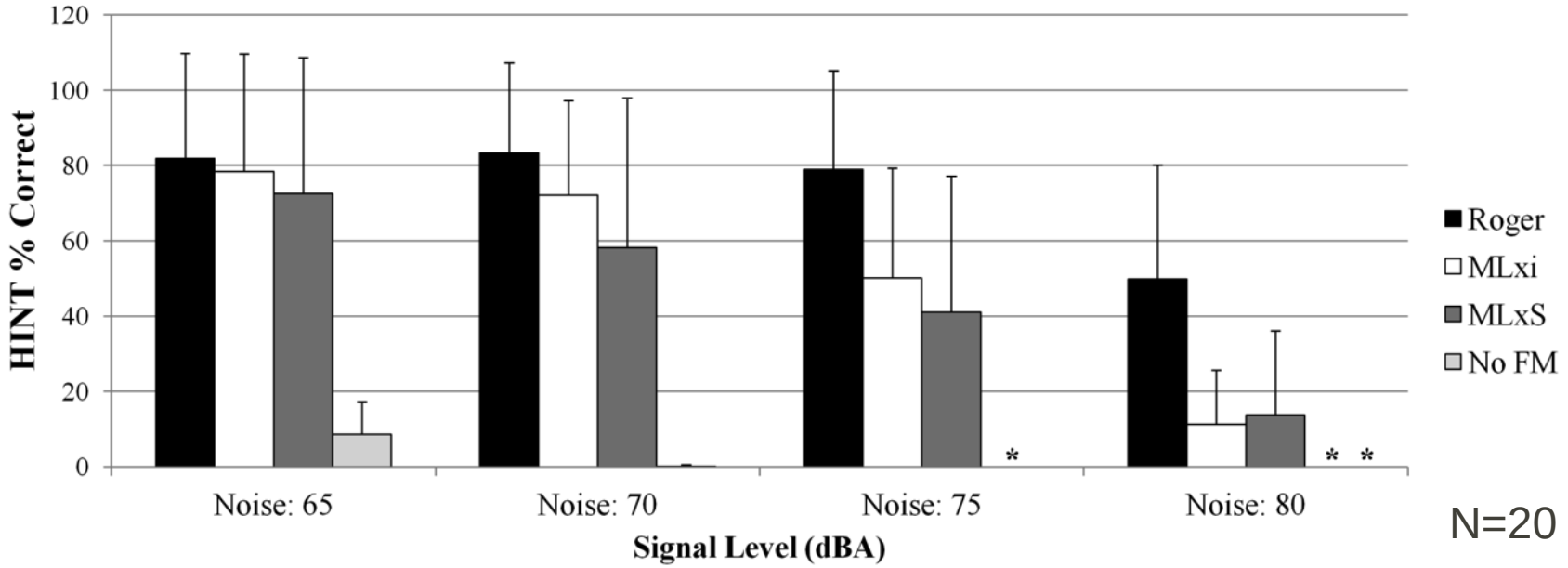
*Accepted by The Journal of the American Academy of Audiology (2013)

PHONAK life is on

Speech understanding with various hearing aids



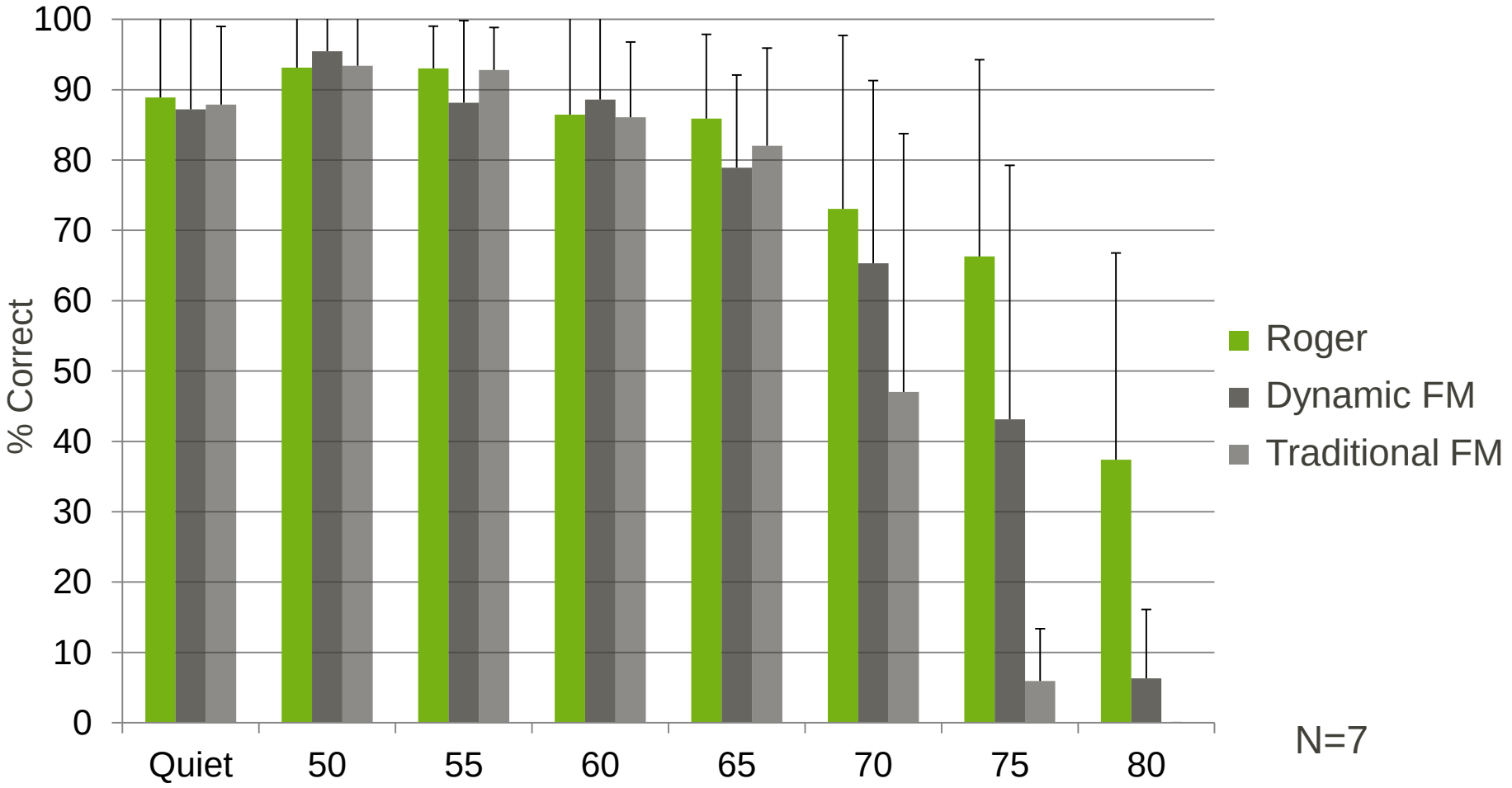
Speech understanding in various noise levels; Cochlear Nucleus 5



N=20

PHONAK
life is on

Speech understanding at various noise levels
MED-EL OPUS 2



*Accepted by The Hearing Journal (2013)

Do we need software for Roger?

- There is no need to use software for Roger.
- FM Successware 4.6.3 is for programming FM products only, but it is not needed for Roger
- The only software you may need is the Roger Upgrader. This is for upgrading the following devices:
  - Inspiro Premium
  - Dynamic Premium
  - AudioHub
  - DigiMaster X
  - DigiMaster 5000
  - DigiMaster 7000
- Dynamic FM receivers cannot be upgraded.

PHONAK
life is on

How can I tell if I have one of the inspiro's that can be upgraded?

- Only inspiro premium can be upgraded.
- The easiest way to check is to look at the USB charging port. If it says 5V 1A, then it can be upgraded.
- But if it says 5V, 750 mA, then it CANNOT be upgraded



Look at USB port for 5V 1A

PHONAK life is on

Wh

- Yo
- G ha htt ht

PHONAK life is on

eServices | Products | Tools | Pediatric | eLearning | Support | Events | Evidence

You are In: Home > Products > Roger > Roger Inspiro

Roger inspiro

This wireless teacher microphone is the core component of any Roger system for education. It features two wearable microphone options, simplified menus and customizable soft keys.

Free upgrade!
Schools that own inspiro Premium teacher microphones can immediately upgrade these to Roger functionality for free. Simply use inspiro's firmware update feature, then add Roger receivers.



Maximum performance

Roger offers the industry's best ever speech-in-noise performance, with proven improvements of up to 54% over other FM and digital systems and 35% over Dynamic FM technology.

Zero hassle

Nothing is easier to use than Roger inspiro. There are no frequencies to program and manage, and devices such as Roger receivers are connected with just a single click.

Full compatibility

Roger is the most compatible system of its kind. Roger inspiro works with virtually every behind-the-ear hearing instrument, cochlear implant and soundfield amplification system, and it is the only system capable of transmitting speech simultaneously to Roger, FM and soundfield listeners.



Roger DynaMic

The Roger inspiro passaround microphone

This sturdy passaround microphone works alongside Roger inspiro in a classroom's MultiTalker Network, allowing the comments of students and secondary teachers to be heard by everyone.

Roger

Portfolios
Roger inspiro
Roger Receivers
Roger Accessories

For Consumers

- User Guide Roger inspiro (PDF, 1MB)

For Professionals

- Brochure Roger for Education (PDF, 3MB)
- Datasheet Roger inspiro (PDF, 1013kB)
- Datasheet Roger DynaMic (PDF, 803kB)
- Datasheet Roger AudioHub (PDF, 881kB)

Software Upgrade

- Roger Upgrader V1.0.2 (ZIP, 61MB)

AK
s on

So, how do we set up a receiver if there is no software???

- Connecting microphones and receivers is easy
- Simply position the Roger inspiro close to a receiver and push the Connect button



PHONAK
life is on

Where is the Connect Button?

- It is the right soft key on the Roger inspiro

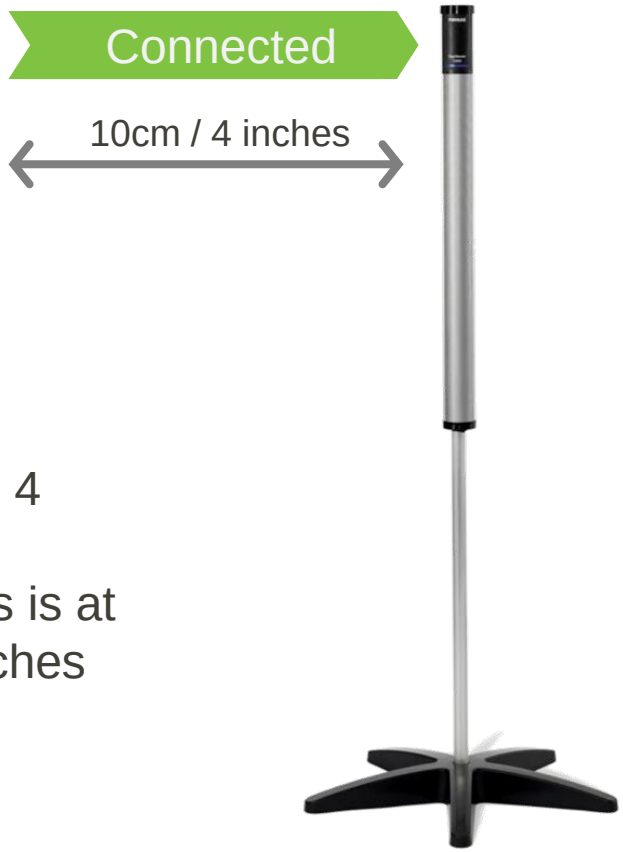


Right Soft Key is Connect

PHONAK life is on

How do I connect a DigiMaster



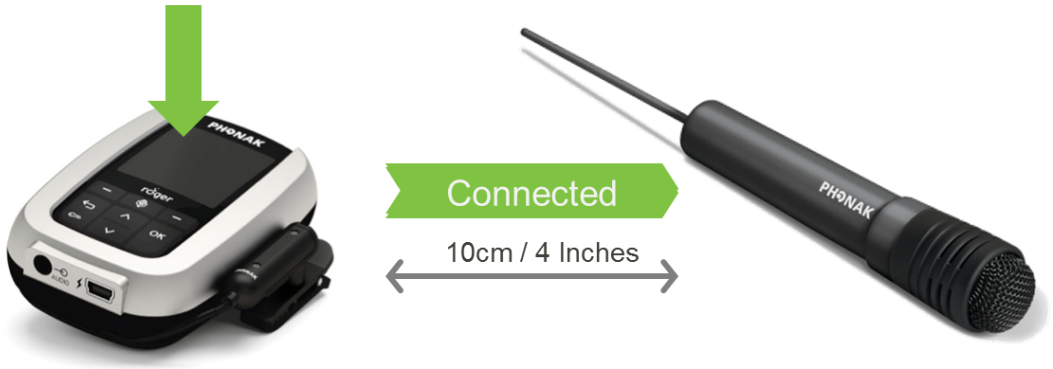


- Once again, simply press the “Connect”button, 4 inches away
- Note that the brains of the DigiMaster speakers is at the top of the unit. So position the inspiro 4 inches from the black top portion of the Digimaster

PHONAK
life is on

How do I set up the MultiTalker Network (MTN)

- Once again, simply use the “Connect” button. Very easy.
- You can add more microphones at any time, but they all must be “Roger” devices
- You can now have up to 35 transmitting devices in MTN (up from 10)
- Rules
  1. First transmitting device must be a Roger inspiro
  2. The remaining 34 can be any combination of Roger inspiro, Roger Dynamic and Roger AudioHub



PHONAK
life is on

Two MultiTalker network settings

Standard setting: Primary Talker

- Teacher is in control and overrules all other microphones
- Secondary microphones are only audible when primary is *not* talking
- Recommended setting for all classroom applications

Optional setting: Equal Talker

- All microphones have identical priority
- First to speak is first to transmit
- Recommended for times when no participant should dominate the conversation

In the inspiro menu: Primary Talker



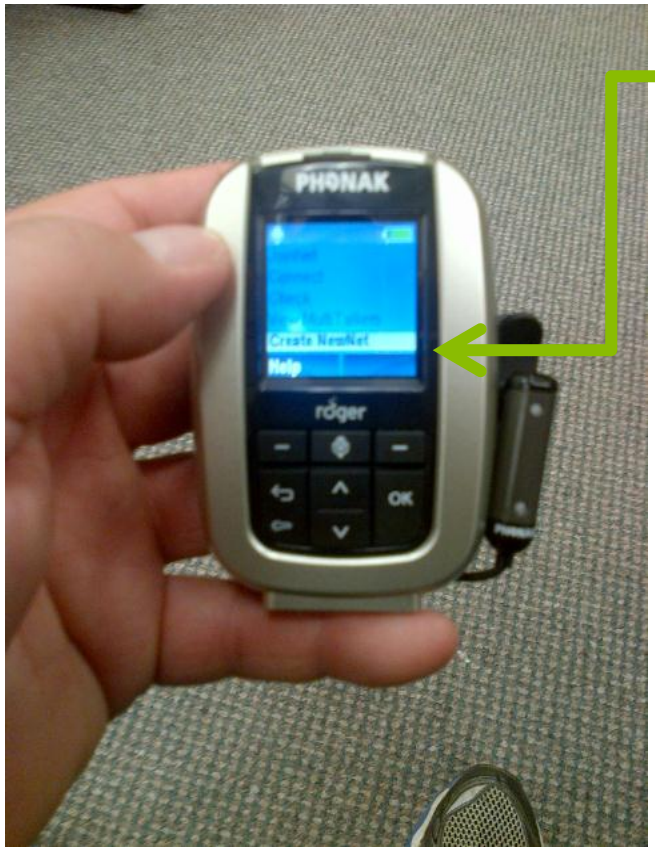
In the inspiro Menu: Equal Talker



PHONAK
life is on

How do I stop MTN in an inspiro so I can use it all by itself again?

- Click “OK” for Menu
- Go to “Network”, click OK
- Go to Create “NewNet” and click OK
- Finally click “Connect” button to connect to the student’s receiver



Create NewNet

PHONAK life is on

Do I need to upgrade to Roger if I am using FM devices only?

- No, you do not need to upgrade to Roger if you are using FM only. But you might want to. Why?
  1. Setting up MultiTalker Network is easier. “Connect”
  2. Setting up connection to DigiMaster X, 5000, or 7000 is also easier. “Connect”
- If you decide to upgrade to Roger, you must upgrade all the transmitting devices.
- To set the Roger inspiro to be “Roger + FM”, use these steps
  1. Press OK for menu
  2. Go to Settings and press OK
  3. Go to Modes, press OK
  4. Go to Application Mode, press OK
  5. Change to Roger + FM
  6. The Roger inspiro will reboot with new settings

PHONAK
life is on

How do I adjust the gain on a Roger Receiver

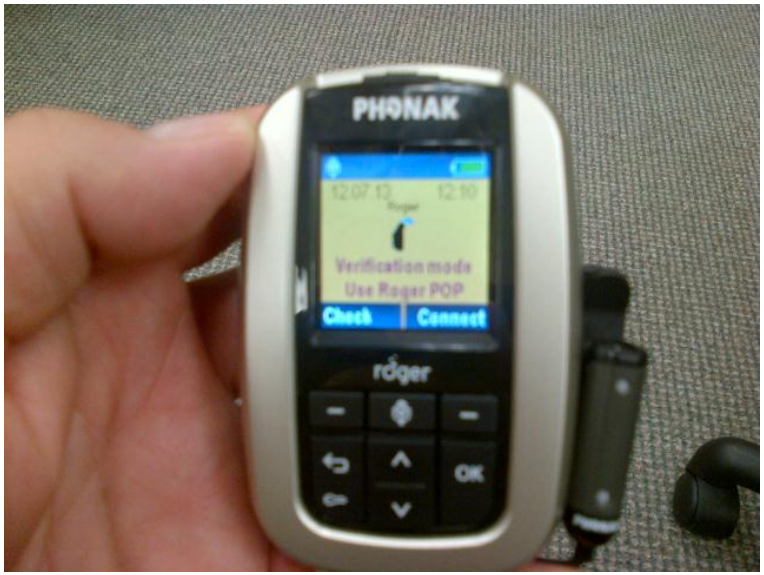
- You may never need to.
- Roger receivers automatically adjust for the electrical impedances of different hearing aids. In addition the Roger system automatically adjust for the room noise.
- If you do adjust the gain, it should only be done while performing a verification measure in a hearing aid test box.
- To adjust the gain, push the left soft key “Check” it will identify the receiver.
- Next, push the right soft key “Manage”, select easy gain and adjust (see page 30 of user manual).



PHONAK
life is on

How do I put the Roger inspiro into Verification Mode?

- Select the menu button, select “Settings”, scroll down to “Verification” select “OK”.
- Select “Activate”, confirm verification mode with right soft key “yes” system will reboot to apply settings.
- Yellow screen and flashing verification mode after reboot, deactivate once verification is completed.



PHONAK
life is on

Can I program a Roger inspiro to work with a specific CI?

- Yes, you can to do this.
- Select the left soft key “check” it will identify the receiver then you select the right soft key “manage”, select CI module and select appropriate setting (see page 31 of user manual).
- Unlike hearing aids, which require no special settings or gain adjustments, it is important to always set up the Roger X receiver for CI’s.
- Choosing the correct setting will ensure that you have the correct loudness

PHONAK
life is on

Roger X connected to CI Speech Processor

- Default CI module setting: ‘automatic’.
- Exceptions:
  - Cochlear Nucleus 5 or
    if the Roger signal is much too soft or too loud and cannot be corrected using the Easy Gain feature
  - In this case it is recommended to program the Roger X with the corresponding CI setting, to be selected in the Roger inspiro

Model	**Roger X setting**
AB Naída CI via ComPilot	Setting 3
AB Neptune	Setting 1
AB Harmony/ Auria	Setting 1
Cochlear Nucleus 5	Setting 9
Med-El Opus 2	Setting 2
Bodyworn processors using ML CI S	Setting 5

PHONAK
life is on

What is the average battery life of a Roger inspiro?

- The average operating time is 10 hours in Roger only mode
- In Roger + FM mode, the battery life is 8 hours
- Battery is a lithium polymer type that is 80% charged in one hour and 100% charge in two.
- Good for up to 1000 charges.
- There is no memory with this battery…therefore NO need to fully discharge before recharging



PHONAK
life is on

What is a Roger WallPilot ?

- This is an optional device.
- It performs 2 functions:
  1. Connects Roger receivers fully automatically
  2. Connects Roger microphones to the MultiTalker network
- Simply to install and set-up
- To be placed in the classroom close to the entrance door
- Two operating ranges
- Powered from the mains but can also be battery operated
- Works fully automatically.



How do I change the Menu Level

Two types of menu are available: Full and Quick.

How to change the menu type:

1. Switch on Roger inspiro
2. When the microphone symbol appears in the top left corner of the Roger inspiro screen, press OK and the left softkey simultaneously,
3. Then press OK again
4. Select the preferred menu type and press OK

Press these two buttons simultaneously. Release and Press “OK” again



PHONAK life is on

What is Roger inspiro SoundField

- **Roger inspiro SoundField** is dedicated for SoundField applications only
- Lower cost transmitter. Can transmit to DigiMaster 5000, 7000, and X only.

	Roger inspiro	Roger inspiro SoundField
Roger receivers	✓	X
FM receivers	✓	X
Roger DigiMaster loudspeakers	✓	✓

PHONAK life is on

Questions….so far?



PHONAK
life is on